

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND**

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BEYOND SYSTEMS, INC.)	
)	
Plaintiff)	
)	
v.)	Case No. 8:08-cv-00921 PJM
)	
WORLD AVENUE, USA, LLC, <i>et al.</i>)	
)	
Defendants.)	
_____)	

FIRST REPORT OF DR. JOHN R. LEVINE

1. I, John R. Levine, Ph.D, am currently an independent computer industry consultant and author specializing in the Internet and Internet-related issues. I was asked by Stephen H. Ring, counsel for the plaintiff in the above-captioned case, to provide this report on Internet marketing, including the use of bulk e-mail and affiliate-based marketing systems, and the kinds of records and data normally generated by these activities. In addition, Mr. Ring asked me to apply these observations and opinions to World Avenue USA, LLC trading under the name, "The Useful," to the extent possible.
2. I am stating my observations and opinions as to the operations of World Avenue USA, LLC trading under the name, "The Useful," in this report to the extent possible relying on publicly available information. It would be my intention to supplement this report after more complete records and data on the operations of "The Useful" have been obtained, and after reviewing deposition testimony from its representatives, that I understand may be obtained during this case.

3. I lecture to and consult for numerous clients including IBM Canada, CBS Television, Minnesota Power, the American Institute of Chemical Engineers, Alex, Brown & Sons, and Hewlett-Packard.
4. I am the chair of the Internet Research Task Force (IRTF) Anti-Spam Research Group. Since 1997, I have been a board member of the Coalition Against Unsolicited Commercial e-mail, an Internet user advocacy group. Also since 1997, I have run the Network Abuse Clearinghouse, also known as abuse.net, a free service that helps Internet users and service providers report and deal with abusive online behavior.
5. I am a Senior Technical Advisor to the Messaging Anti-Abuse Working Group (MAAWG), the leading industry anti-spam forum, whose members include Google, Yahoo, Microsoft, AOL, Verizon, AT&T, Openwave, and many other large networks and software vendors.
6. I have been a network manager for a private network that hosts over 300 Internet domains and web sites, totaling over 300,000 web pages, since 1995.
7. I operate a variety of electronic mail servers for myself and approximately 1,000 other people. As part of running this service, I deal daily with issues of spam and other e-mail abuse.
8. I have authored or co-authored over a dozen books on computer and electronic mail issues including: *The Internet for Dummies* (now in its 11th edition, with over eight million copies in print), *Mobile Internet for Dummies* (in press), *Internet Privacy for Dummies* (2002), *Internet Secrets* (2d ed. 2000), *E-mail for Dummies* (2nd ed. 1997), and *qmail* (2004).

9. I have been active in the computer industry for thirty years, working for Interactive Systems Corporation (the first commercial provider of UNIX software) between 1979 and 1984 and Javelin Software (creators of an award winning PC modeling tool) from 1984 to 1987. In 1989, I co-founded Segue Software, currently a leading provider of web and client/server testing software, where I continued as a director and consultant until the company was sold in April 2006.
10. I received a B.A. in Computer Science with a minor in Mathematical Economics from Yale University in 1975, and a Ph.D. in Computer Science from Yale University in 1984.
11. I understand that World Avenue is a Florida company that does business under a variety of names including Niu Tech and TheUseful.com, and has been named as a defendant in other litigation. I have reviewed documents from Walmart v. Niu Tech, Case No. 5:06-cv-5093, U.S. District Court for the Western District of Arkansas, and from Balsam vs. World Avenue USA, LLC, Case No.821162, Superior Court, San Francisco, California.
12. In the Walmart case Homer Appleby, who identified himself as an officer of The Useful, described his company as “an Internet marketing company that promotes products and/or services to the consuming public through third party affiliate networks and e-mail marketing companies.” Exhibits filed in the Balsam case include a variety of e-mails that link to images and other materials stored on TheUseful's web servers. Mr. Appleby's statement and the other exhibits in these cases confirm that “the Useful” uses a typical affiliate-based marketing model, relying largely on bulk e-mail.

13. Web server logs are files automatically created and maintained by specialized computers called “servers” in order to record the server’s activity and communications. It is standard practice for all web servers to create logs. Therefore, it would be standard practice for World Avenue’s web servers to create such records. In addition, World Avenue’s mail servers would create their own logs of all incoming and outgoing e-mails.
14. World Avenue’s computers, upon receipt of an e-mail complaint or opt-out request, would create an electronic record of the e-mail, including recording the domain name and IP address used in the e-mail which prompted the recipient’s complaint.
15. The log files created by the web and the mail servers are often discarded after only a short period of time. The schedule for log rotation (when new logs replace old logs) varies, but is generally from a few months to a week or less.
16. Rotating web and mail logs causes the deletion of the records regarding the server’s activity and communications, including its record of incoming and outgoing e-mails.
17. Among other things, the web and mail servers at World Avenue would keep a record of information regarding customer complaints and opt-out requests. World Avenue also might maintain a database of opt-out requests for purposes of compliance with federal anti-spam law (“CAN-SPAM”).
18. In connection with a particular complaint or opt-out request, World Avenue’s web and mail logs would record several types of reports, including: (a) information sent directly by the recipient, (b) web logs from unsubscribe links, (c) Feedback Loop (FBL) messages from large ISPs that provide information when a recipient hits a “This is spam” button, and (d) spam reports sent through third-party services such as

SpamCop. Mail logs would record type (a), (c) and (d) reports; web logs would record type (b) reports.

19. Type (a) or (c) reports typically have the full message appended, and type (a) reports could include the e-mail header information, depending on how the e-mail recipient sent the message to World Avenue. Header data gives important information about who sent an e-mail, what domain it was from, who it was addressed to, and what transmission path it followed. Type (b) reports would include a link from the message along with the IP address and timestamp from the user. Type (d) reports are often redacted by third-party services such as SpamCop, but may contain anything from the full e-mail message with headers to a smaller portion of the e-mail.
20. In each case, except possibly in the case of type (d) reports, there should be enough information in the server logs to identify the sender and recipient of the e-mail.
21. Opt-out requests also provide information critical to identifying the senders and collaborators on any particular e-mail. The opt-out e-mail usually contains information that identifies any “middleman” ad network and the mailer responsible for the e-mail. This way, when a recipient sends the opt-out e-mail to World Avenue, World Avenue can ascertain who sent the offending e-mail in order to contact the middleman and/or mailer and ask that they cease sending e-mail to the particular complaining recipient. This identifying information typically would also serve the purpose of allowing the advertiser to determine who was responsible for a particular e-mail which resulted in a click-through, lead or sale so that the collaborators on that e-mail can be paid.

22. World Avenue would be able to identify who sent each e-mail, including by reviewing the text strings or computer code (typically called a “referral ID” or a “referral link”) in each advertisement e-mail and would be able to correlate the referral IDs/links to the persons or entities that sent the advertisement e-mails. This would allow World Avenue to be able to identify at least some of the actors involved in the spam chain.
23. The actors involved in a spam chain typically attempt to disguise their identities, and without the mapping information for the referral IDs, it is very difficult, if not impossible, to ascertain who are those actors are.
24. When World Avenue receives an e-mail complaint or opt-out request, its computers would also record in its mail logs pertinent data regarding the redirection of a recipient who might click on links in the e-mail through “landing pages” belonging to the advertising middlemen and spam senders, before the consumer is sent to the end advertisement. This data also reveals the disguised routing which helps to identify the middlemen and mailers responsible for the e-mails.
25. The data maintained in these logs would be relevant to assessing the false or misleading nature of a particular e-mail.
26. This information would be lost once the server logs are rotated, or as a result of overwriting data.
27. There is little incentive to retain the details of complaints and opt-out requests, since those details would document the mailer’s compliance or lack thereof with the federal CAN-SPAM opt-out requirements.
28. Spammers use multiple, often falsely-registered, domain names. Domain names are constantly changing because each day some of the hundreds of domains registered by

the middlemen or spammers expire and new domains are registered. Once the domain expires, it is difficult to reconstruct what entity was responsible for which e-mails because there are over 900 different ICANN-accredited registrars in all parts of the world, so it is not practical to get historical information unless one knows the exact registrar they used.

29. Although practices vary, it is not uncommon for referral IDs, which identify a particular spammer, to be erased once a spammer has been “terminated,” and it is not uncommon to allow a terminated affiliate to sign up again using slightly different contact information, *e.g.*, a different e-mail address.
30. Acceleratebiz is a web hosting provider. I have examined its web site at <http://www.acceleratebiz.com/> where it advertises a wide variety of web hosting services that permit other entities to create and operate web sites.
31. Acceleratebiz hosts a customer’s applications or data on its servers. It would therefore be standard practice for Acceleratebiz’s web servers to create e-mail and web logs of its customers’ activity; however these logs would be of a different nature than those created by World Avenue’s web servers.
32. Acceleratebiz’s web servers would create a log of outgoing and incoming e-mails that pass through those servers. These logs reflect the sender and recipient of an e-mail message by showing contacts between the sender’s and the recipient’s servers. The logs also reflect the identity of many of the other parties in the e-mail chain.

Therefore, Acceleratebiz’s logs would reflect spam e-mail messages sent to BSI over Acceleratebiz’s network, the identity of the senders of those e-mails, and the identity of many other parties in the spam chain, such as middlemen.

33. The log files created by web servers are often discarded after only a short period of time. The schedule for log rotation varies, but is generally from a few months to a week or less.
34. It is also typical for web hosting providers such as Acceleratebiz to provide back-up services for their customers. The data contained in these back-ups enables Acceleratebiz to map the affiliate IDs. An affiliate ID is a string of text contained in the URL being advertised in an e-mail. Advertisers whose products are promoted via bulk e-mail often use "affiliates" to do the actual spamming. The advertiser compensates the affiliates via commissions for "click throughs," leads and/or sales resulting from traffic driven to a sales web site by the e-mails. The purpose of the e-mail is to drive traffic to a web site where purchases can take place. The prospective customer is taken to the web site via a hyperlink in the e-mail. When a recipient of an e-mail clicks on that hyperlink, the recipient is taken to the purchase web site, and the recipient's browser passes the entire URL, including the affiliate ID, to a specified web server. The advertiser or an agent thereof then records the affiliate ID delivered with each "click-through," in order to credit and compensate the specific affiliate. Mapping the affiliate ID therefore enables Acceleratebiz to identify the sender of an e-mail message, and could also allow Acceleratebiz to identify the advertiser.
35. Back-up files created by Acceleratebiz's servers are often discarded after a short period of time. The schedule for server rotation varies, but generally from a few months to a week or less.
36. Providers such as Acceleratebiz will also often receive complaints and opt-out requests, but, generally, from a different subset of individuals than those contacting

World Avenue. Individuals who are more technologically sophisticated will often look at the header of a given e-mail message to identify the particular host computers and networks through which the e-mail message was sent. The person would then e-mail Acceleratebiz to complain about the message, or to request to opt-out of receiving e-mail messages from that address. In connection with a particular complaint or opt-out request, Acceleratebiz's web and mail logs would record similar reports as World Avenue's web and mail logs would record, indicating the identities of various members of the spam chain.

37. When a web-hosting provider such as Acceleratebiz receives a complaint about a particular customer or IP address, it might re-assign that customer to a different IP address. Recipients of spam often block IP addresses from which they receive the spam. By re-assigning a spammer from one IP address to another IP address, Acceleratebiz could help that spammer to avoid blocks to its spam and thus assist a spammer in continuing to send spam, even to individuals who attempt to prevent spam by blocking IP addresses.

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